



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,044	02/05/2004	Yukihisa Hirotsugu	TI-36214	5447

7590 03/23/2005  
Dan Swayze  
Texas Instruments Incorporated  
M/S 3999  
P. O. Box 655474  
Dallas, TX 75265

EXAMINER

NGUYEN, HIEP

ART UNIT PAPER NUMBER

2816

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

CA

<b>Office Action Summary</b>	<b>Application No.</b> 10/773,044	<b>Applicant(s)</b> HIROTSUGU ET AL.	
	<b>Examiner</b> Hiep Nguyen	<b>Art Unit</b> 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-20 is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02-05-04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The Examiner tried to contact the Attorney on 03-16-05 to propose an examiner's amendment concerning 112, 2<sup>nd</sup> problems in order to put the application in a condition for allowance. However, the Attorney did not respond and as a result, this Office Action is issued for addressing the 112, 2<sup>nd</sup> problems only.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction and /or clarification is required.

Regarding claims 1 and 3, the recitations “ the first differential pair of amplifying transistors” on line 3 and “ the second differential pair of amplifying transistors” on line 5 are indefinite because it is not clear as to they are same or different than the recitations “a first differential pair of transistors” and “a second differential pair of transistors” on line 2. If they are different than these recitations do not have antecedent basis. The same rational is applied to the recitations “ the first differential pair of amplifying transistors” on lines 14-15 and “ the second differential pair of amplifying transistors” on lines 16-17. The recitation “the first transistor” and “second transistor” on line 23 are indefinite because it is not clear as to they are same or different than the recitations “a first differential pair of transistors” and “ a second differential pair of transistors” on lines 2. In claim 3, the recitations “ the first differential pair of amplifying transistors” on line 3 and “ the second differential pair of amplifying transistors” have the same 112, 2<sup>nd</sup> problem.

Claims 2 and 4-8 are indefinite because of the technical deficiencies of claim 1.

#### ***Allowable Subject Matter***

Claim 1-8 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Art Unit: 2816

Claims 9-20 are allowed.

Claims 1-8 would be allowable because the prior art of records (US Pat. 6,847,501 and 6,552,593) fails to teach or fairly suggest a first stage of a preamplifier circuit comprising: a first differential pair of transistors and a second differential pair of transistors coupled to input terminals through capacitors; first and second current loops comprising resistors and transistor switches coupled to the bases of the first and second differential pair of transistors, the first current loop and second current loop operable to equalize the charges upon the first transistor and second transistor as called for in claim 1.

Claims 9-20 are allowed because the prior art of records (US Pat. 6,847,501 and 6,552,593) fails to teach or fairly suggest first and second circuits comprising first and second pair of differential transistors, first and second current loops comprising switches and resistors coupled to the bases of the first and second pair of differential transistors as called for in claim 9; a method of reducing the offset current from a base current compensation circuit, comprising: placing a current loop comprised of a balanced pair of resistors opposite each other and a pair of transistor switches opposite each other across the bases of a differential pair of transistors; and capacitively coupling said current loop to the input of a circuit so that the current loop charges input capacitors so as to decrease the recovery time of the circuit as called for in claim 18.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hiep Nguyen whose telephone number is (571) 272-1752. The examiner can normally be reached on Monday to Friday from 7:30am to 4:00pm.

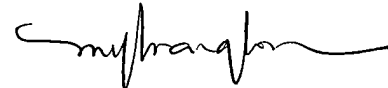
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2816

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hiep Nguyen

03-17-05



MY-TRANG NUTON  
PRIMARY EXAMINER

3/21/05